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| 10/661,313 | 09/12/2003 | Kevin Jackman | 7429 US | 7818 |

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| EXAMINER | |
|---|---|
| PENG, FRED H | |

| ART UNIT | PAPER NUMBER |
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/661,313 | JACKMAN, KEVIN | |
| | Examiner | Art Unit | |
| | Fred Peng | 2623 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *13 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### *Response to Arguments*

1. Applicant's arguments filed on 11/13/2007 have been fully considered but they are not persuasive.

Applicant argues on pages 2-3 of Remarks that the summing of each individual time to receive each module to calculate the cold boot time based on the combination of prior art and Goodman is different from subtracting the start time from the finish time as in Claim 1 step f.

The Examiner respectfully disagrees with applicant's arguments.

Goodman teaches receiving root directory (AIT) before receiving all the remaining modules (Col 2 lines 46-50; Col 6 lines 5-22), the prior art teaches calculating the cold boot time, the start time and the time to receive the last module (FIG.1 and FIG.2). Since Goodman teaches receiving AIT first, all the modules to be received will be known beforehand, the method of adding each individual time or subtracting the start from the finish time will have the same results as the applicant's.

However, It would have been obvious to one of ordinary skill in the art at the time the invention was made to determining the cold boot time by subtracting the start time from the finish time as an easy and quicker way to achieve the results.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1, 3-6, 8 and 10-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art (Figs. 1 and 2, hereinafter referred as "prior art") in view of Goodman et al (US 6,427,238 B1).

Regarding Claim 1, the prior art discloses a method monitoring a nominal cold boot time for an application from a Multimedia Home Platform (MHP) transport stream comprising the steps of:

a) recording a start time for a selected start position in the transport stream (Figs. 1 and 2; Para 20- Para 23);

The prior art further discloses a finish time to receive the last module and the total time to determine the nominal cold boot time (Figs. 1 and 2; Para 20- Para 23).

The prior art is silent about transport stream containing an Application Information Table (AIT) and steps of :

b) identifying after the selected start position in the transport stream a service having an Object Carousel and an associated AIT section;

c) receiving a next occurrence after the service in the transport stream of the associated AIT section for the application;

d) analyzing the associated AIT section to determine a root asset and remaining assets required by the application;

e) receiving after the associated AIT section in the transport stream a next occurrence of a module containing the root asset and subsequent occurrences of modules containing the remaining assets, recording a time of receipt of the last such module as a finish time; and

f) determining the nominal cold boot time by subtracting the start time from the finish time.

In an analogous art, Goodman discloses transport stream containing an AIT (FIG.3; Application Directory Module is an AIT; Col 1 lines 49-54) and steps of:

b) identifying after the selected start position in the transport stream a service having an Object Carousel and an associated AIT section (FIG.3; Col 2 lines 20-44);

c) receiving a next occurrence after the service in the transport stream of the associated AIT section for the application (Col 2 lines 42-44);

d) analyzing the associated AIT section to determine a root asset and remaining assets required by the application (Col 2 lines 42-46);

e) receiving after the associated AIT section in the transport stream a next occurrence of a module containing the root asset and subsequent occurrences of modules containing the remaining assets (FIG.3; Col 2 lines 46-50; Col 6 lines 5-22).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the prior art's method to include AIT and steps of: b) identifying after the selected start position in the transport stream a service having an Object Carousel and an associated AIT section; c) receiving a next occurrence after the service in the transport stream of the associated AIT section for the application; d) analyzing the associated AIT section to determine a root asset and remaining assets required by the application; e) receiving after the associated AIT section in the transport stream a next occurrence of a module containing the root asset and subsequent occurrences of modules containing the remaining assets, as taught by Goodman so that modules required by the applications can be identified before downloading to improve downloading efficiency.

The prior art discloses a start time, an end time, and the cold boot time; but not specifically disclose determining the cold boot time by subtracting the start time from the finish time.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to determining the cold boot time by subtracting the start time from the finish time as an easy and quicker way to achieve the results.

Claim 8 is an implementation of the method described in Claim 1 which has been analyzed and rejected.

Regarding Claim 3, the prior art further discloses determining a succeeding nominal cold boot time is repeatable (Figs. 1 and 2; Para 6).

Regarding Claims 4 and 10, the prior art further discloses graphically displaying the nominal cold boot times (Fig.2; Para 20 - Para23).

Regarding Claims 5 and 11, Goodman further discloses detecting incorrect or insufficient AIT information in the AIT section to properly download the application; and outputting a warning signal (Col 10 lines 13-29).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the prior art's system to include detecting incorrect or insufficient AIT information in the AIT section to properly download the application; and outputting a warning signal, as taught by Goodman to aid the user for debugging.

Regarding Claims 6 and 12, Goodman further discloses detecting an inability to boot the application because of the incorrect or insufficient AIT information (Col 10 lines 17-22; shut down the set-top box when the directory module is not certified).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the prior art's system to include detecting an inability to boot the application because of the incorrect or insufficient AIT information, as taught by Goodman to aid the user to identify the root cause.

4. Claims 2 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art and Goodman et al (US 6,427,238 B1) as applied to claims 1 and 8 above, and further in view of Ohkura et al (US 6,347,400).

Regarding Claim 2, the prior art discloses the cold boot time. The prior art and Goodman both are silent about outputting a signal representative of the nominal cold boot time to a user interface.

In an analogous art, Ohkura teaches (Background para 12) the delay in program start time associated with Near Video On Demand (NVOD) is due to the delay in the downloading, or boot time, of the program received from among several channels on the transport stream.

Ohkura further teaches that the expected delay time, until the start time of the next available program, is outputted to a user interface (Ohkura et al, para. 118; Fig. 8/NVOD REGION).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined system of the prior art and Goodman to include outputting a signal representative of the nominal cold boot time to a user interface as taught by Ohkura to facilitate more friendlier user interface during a program downloading.

Claim 9 is an implementation of the method described in Claim 2 which has been analyzed and rejected.

5. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over applicant's admitted prior art and Goodman et al (US 6,427,238 B1) as applied to claim 1 above, and further in view of Bisdikian et al (US 6,047,317).

Regarding Claim 7, the prior art and Goodman disclose the cold boot time and AIT used in Carousel.

Both the prior art and Goodman are silent about modifying the transport stream by varying an AIT repetition rate in the transport stream to vary the nominal cold boot time.

In an analogous art, Bisdikian discloses a high repetition rate in the data receiving like image data can reduce the image access time (Col 2 line 62 – Col 3 line 3).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combined system of the prior art and Goodman to include modifying the transport stream by varying an AIT repetition rate in the transport stream to vary the nominal cold boot time, as taught by Bisdikian so that the system's transmission capabilities can be fully utilized.

***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Fred Peng whose telephone number is (571) 270-1147. The examiner can normally be reached on Monday-Friday 09:00-18:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivek Srivastava can be reached on (571) 272-7304. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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